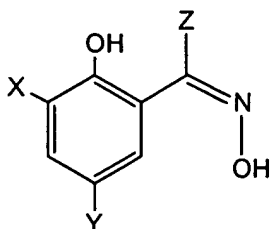


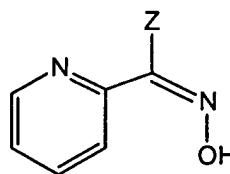
**Amendments to the Claims:** This listing of claims will replace all prior versions, and listings, of claims in the application

**Listing of Claims:**

1. (Currently Amended) A process for the preparation of a polymer comprising the step of performing a ring-opening polymerisation reaction of at least one lactone, lactam, cyclic ether, cyclic carbonate, cyclic carbamate, lactide, or other cyclic compound which is susceptible to ring-opening polymerisation, in the presence of a catalyst which comprises the reaction product of
  - (i) at least one compound of titanium, zirconium or hafnium which is selected from the group consisting of an alkoxide, halide, condensed alkoxide, amide, condensed amide, mixed halo-alkoxide ~~or~~, mixed halo-amide, sulphonic acid derivative, sulphonamide, silanol ~~or~~ and silylamide of titanium zirconium, hafnium or aluminium or a mixture thereof,
  - and
  - (ii) a complexing compound selected from the ~~list comprising~~ the group consisting of oximes, hydroxy-Schiff bases, 8-hydroxyquinoline derivatives, 10-hydroxybenzo-[h]-quinoline derivatives, hydrazones ~~and substituted phenols~~, phenol and phenol substituted with a hydroxy, hydroxyalkyl, amino, amioalkyl, nitro, oxazole, thiazole, alkyl, or alkoxy group.
2. (Currently Amended) A process ~~as claimed in~~ according to claim 1, wherein the complexing compound is an aryl-substituted (including polycyclic aryl-) (aromatic or heterocyclic) oxime of Formula 1 or Formula 2,



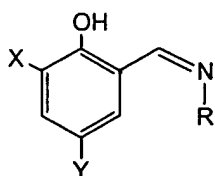
Formula 1



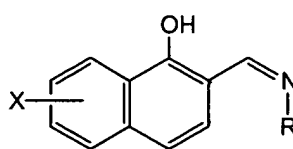
Formula 2

in which X and Y, which may be the same or different, are selected from H, alkyl (~~preferably C<sub>1</sub>—C<sub>6</sub> alkyl, e.g. t-butyl~~), alkoxy, NO<sub>2</sub>, halogen, amino (including alkylamino) and Z is selected from H, or an alkyl aryl or pyridyl group, any of which may be substituted or unsubstituted.

3. (Currently Amended) A process ~~as claimed in~~ according to claim 1 , wherein the complexing compound is a hydroxy-Schiff base of general Formula 3 or 3a,



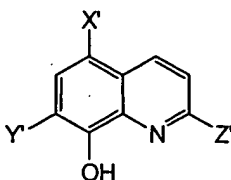
Formula 3



Formula 3a

where X and Y are selected from H, alkyl (~~preferably C<sub>1</sub>—C<sub>6</sub> alkyl, e.g. t-butyl~~), alkoxy, NO<sub>2</sub>, halogen, amino (including alkylamino) and R is substituted or unsubstituted alkyl, including cycloalkyl, aryl, aryloxy, alkoxy, or a polycyclic group such as quinolyl.

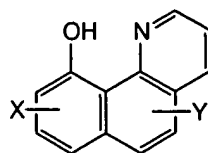
4. (Currently Amended) A process ~~as claimed in~~ according to claim 3 wherein the hydroxy Schiff base is a dimeric or trimeric Schiff base, in which R in Formula 3 or 3a comprises a linking group which is linked to a second or third Schiff base moiety and said linking group contains between 1 and 6 atoms which comprise one or more of C, N and O.
5. (Currently Amended) A process ~~as claimed in~~ according to claim 1 , wherein the complexing compound is a 8-hydroxyquinoline derivative of the general formula 4:



Formula 4

where X' and Y' are, independently H, halogen, NO<sub>2</sub>, alkyl or alkenyl and Z' is alkyl.

6. (Currently Amended) A process ~~as claimed in~~ according to claim 1 , wherein the complexing compound is a 10-hydroxybenzo-[h]-quinoline derivative of the general formula 5.



Formula 5

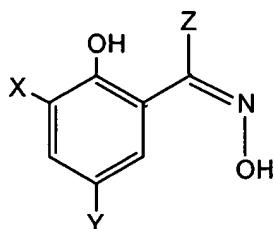
7. (Currently Amended) A process ~~as claimed in~~ according to claim 1, wherein the complexing compound is an aromatic hydrazone, which may be unsubstituted or substituted at either the aromatic ring or the N atom.
8. (Canceled)
9. (Currently Amended) A catalyst for the ring opening polymerisation of a lactone, lactam, cyclic ether, cyclic carbonate, cyclic carbamate, lactide, or other cyclic compound which is susceptible to ring-opening polymerisation comprising the reaction product of
  - (i) ~~an at least one compound of titanium, zirconium or hafnium which is selected from the group consisting of an~~ at least one compound of titanium, zirconium or hafnium which is selected from the group consisting of an alkoxide, halide, condensed alkoxide, amide, condensed amide, mixed halo-alkoxide ~~or~~, mixed halo-amide, sulphonic acid derivative, sulphonamide, silanol ~~or and~~ and silylamide of titanium zirconium, hafnium ~~or aluminium or a mixture thereof,~~
  - and
  - (ii) a complexing compound selected from the list comprising oximes, hydroxy-Schiff bases, 8-hydroxyquinoline derivatives, 10-hydroxybenzo-[h]-quinoline derivatives, ~~and substituted phenols~~ hydrazones, phenol and phenol substituted with a hydroxy, hydroxyalkyl, amino, amioalkyl, nitro, oxazole, thiazole, alkyl, substituted alkyl, or alkoxy group.
10. (Currently Amended) A polymerisable mixture comprising at least one lactone, lactam, cyclic ether, cyclic carbonate, cyclic carbamate, lactide, or other cyclic compound which is susceptible to ring-opening polymerisation, and a catalyst comprising comprising the reaction product of
  - (i) at least one compound of titanium, zirconium or hafnium which is selected from the group consisting of an alkoxide, halide, condensed alkoxide, amide, condensed

amide, mixed halo-alkoxide or, mixed halo-amide, sulphonic acid derivative, sulphonamide, silanol ~~or and silylamide of titanium zirconium, hafnium or aluminium or a mixture thereof,~~

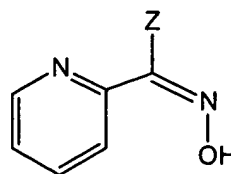
and

(ii) a complexing compound selected from the list comprising oximes, hydroxy-Schiff bases, 8-hydroxyquinoline derivatives, 10-hydroxybenzo-[h]-quinoline derivatives, ~~and substituted phenols~~ hydrazones, phenol and phenol substituted with a hydroxy, hydroxyalkyl, amino, amioalkyl, nitro, oxazole, thiazole, alkyl, substituted alkyl, or alkoxy group.

11. (New) A catalyst according to claim 9, wherein the complexing compound is an aryl-substituted (including polycyclic aryl-) (aromatic or heterocyclic) oxime of Formula 1 or Formula 2,



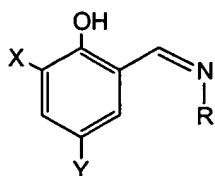
Formula 1



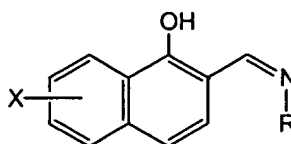
Formula 2

in which X and Y, which may be the same or different, are selected from H, alkyl, alkoxy, NO<sub>2</sub>, halogen, amino (including alkylamino) and Z is selected from H, or an alkyl aryl or pyridyl group, any of which may be substituted or unsubstituted.

12. (New) A catalyst according to claim 9, wherein the complexing compound is a hydroxy-Schiff base of general Formula 3 or 3a,



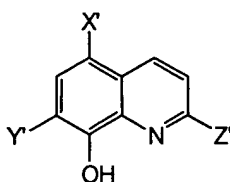
Formula 3



Formula 3a

where X and Y are selected from H, alkyl, alkoxy, NO<sub>2</sub>, halogen, amino (including alkylamino) and R is substituted or unsubstituted alkyl, including cycloalkyl, aryl, aryloxy, alkoxy, or a polycyclic group such as quinolyl.

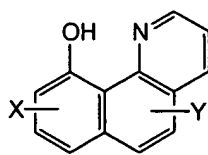
13. (New) A catalyst according to claim 12 wherein the hydroxy Schiff base is a dimeric or trimeric Schiff base, in which R in Formula 3 or 3a comprises a linking group which is linked to a second or third Schiff base moiety and said linking group contains between 1 and 6 atoms which comprise one or more of C, N and O.
14. (New) A catalyst according to claim 9, wherein the complexing compound is a 8-hydroxyquinoline derivative of the general formula 4:



Formula 4

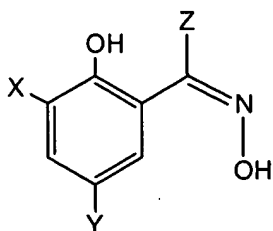
where X' and Y' are, independently H, halogen, NO<sub>2</sub>, alkyl or alkenyl and Z' is alkyl.

15. (New) A catalyst according to claim 9, wherein the complexing compound is a 10-hydroxybenzo-[h]-quinoline derivative of the general formula 5.

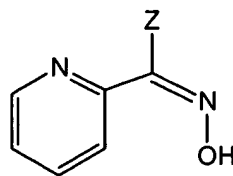


Formula 5

16. (New) A catalyst according to claim 9, wherein the complexing compound is an aromatic hydrazone, which may be unsubstituted or substituted at either the aromatic ring or the N atom.
17. (New) A polymerisable mixture according to claim 10, wherein the complexing compound is an aryl-substituted (including polycyclic aryl-) (aromatic or heterocyclic) oxime of Formula 1 or Formula 2,



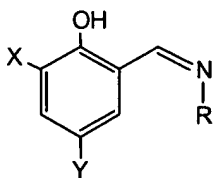
Formula 1



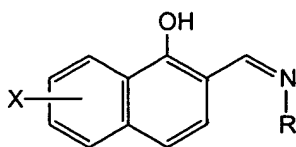
Formula 2

in which X and Y, which may be the same or different, are selected from H, alkyl, alkoxy, NO<sub>2</sub>, halogen, amino (including alkylamino) and Z is selected from H, or an alkyl aryl or pyridyl group, any of which may be substituted or unsubstituted.

18. (New) A polymerisable mixture according to claim 10, wherein the complexing compound is a hydroxy-Schiff base of general Formula 3 or 3a,



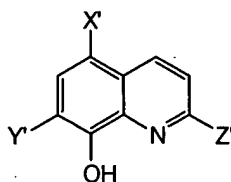
Formula 3



Formula 3a

where X and Y are selected from H, alkyl, alkoxy, NO<sub>2</sub>, halogen, amino (including alkylamino) and R is substituted or unsubstituted alkyl, including cycloalkyl, aryl, aryloxy, alkoxy, or a polycyclic group such as quinolyl.

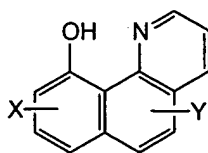
19. (New) A polymerisable mixture according to claim 18, wherein the hydroxy Schiff base is a dimeric or trimeric Schiff base, in which R in Formula 3 or 3a comprises a linking group which is linked to a second or third Schiff base moiety and said linking group contains between 1 and 6 atoms which comprise one or more of C, N and O.
20. (New) A polymerisable mixture according to claim 10, wherein the complexing compound is a 8-hydroxyquinoline derivative of the general formula 4:



Formula 4

where X' and Y' are, independently H, halogen, NO<sub>2</sub>, alkyl or alkenyl and Z' is alkyl.

21. (New) A polymerisable mixture according to claim 10, wherein the complexing compound is a 10-hydroxybenzo-[h]-quinoline derivative of the general formula 5.



Formula 5

22. (New) A polymerisable mixture according to claim 10, wherein the complexing compound is an aromatic hydrazone, which may be unsubstituted or substituted at either the aromatic ring or the N atom.
23. (New) A process according to claim 2, wherein X and Y, which may be the same or different, are C<sub>1</sub>-C<sub>6</sub> alkyls.
24. (New) A process according to claim 3, wherein X and Y, which may be the same or different, are C<sub>1</sub>-C<sub>6</sub> alkyls.
25. (New) A catalyst according to claim 11, wherein X and Y, which may be the same or different, are C<sub>1</sub>-C<sub>6</sub> alkyls.
26. (New) A catalyst according to claim 12, wherein X and Y, which may be the same or different, are C<sub>1</sub>-C<sub>6</sub> alkyls.
27. (New) A polymerisable mixture according to claim 17, wherein X and Y, which may be the same or different, are C<sub>1</sub>-C<sub>6</sub> alkyls.
28. (New) A polymerisable mixture according to claim 18, wherein X and Y, which may be the same or different, are C<sub>1</sub>-C<sub>6</sub> alkyls.